

**Abstract**

A closure device is provided for sealing a puncture in a body vessel. The closure device includes an energy delivery device for delivering energy to tissue adjacent the vessel puncture which enhances an adhesiveness of the tissue to a closure composition precursor. The closure device includes a sealer/dilator for dilating tissue adjacent a vessel puncture, at least one closure composition precursor lumen within the sealer/dilator having an entrance port adjacent the proximal end of the sealer/dilator through which one or more fluent closure composition precursors can be delivered into the closure composition precursor lumen and an exit port adjacent the distal end of the sealer/dilator through which the one or more fluent closure composition precursors can be delivered outside the vessel adjacent the vessel puncture, and a plugging catheter for positioning within the vessel puncture, the plugging catheter extending distally from the sealer/dilator and including at least one position sensing mechanism such that the exit port of the closure composition precursor lumen is outside the vessel when the at least one position sensing mechanism is detected outside the vessel.